

## Summary of Disease Agents Controlled for by the National Poultry Improvement Plan.

	Species affected	Transmission	Clinical signs	Diagnosis	Prevention
<b><i>Salmonella pullorum</i></b>	chickens turkeys other fowl Especially young	transovarial fecal ingestion	Young chicks – somnolence, inappetence, drooping wings, huddle near heat source, diarrhea, dehydration, chalk-white excreta, labored breathing, joint swelling, lameness Adults – no clinical signs, but drop in egg production, fertility and hatchability of eggs	Isolation of organism Necropsy: white nodules in liver, lungs, heart and ceca; swollen kidneys and spleen; urates in ureters; interstitial pneumonia; ceca with yellow cheesy material. Adults: distorted, discolored ovary, peritonitis, pericarditis, white nodules in testes Serologic testing	Complete eradication
<b><i>Salmonella gallinarum (Fowl typhoid)</i></b>	chickens turkeys other fowl	mechanical egg ingestion	Similar to <i>S. pullorum</i> Listless, dehydrated Green-yellow diarrhea Pale combs and wattles Decreased feed consumption Increased water consumption	Isolation of organism Necropsy: enlarged and mottled spleen; swollen, friable and bile-stained liver; hemorrhages in muscles and fat bordering internal organs; swollen small intestine. Turkeys may have small white plaques in small intestines	Complete eradication
<b><i>Mycoplasma gallisepticum</i></b>	chickens turkeys other fowl	aerosol direct contact transovarial	Variable Respiratory distress, rales, cough, sneezing, nasal discharge, epiphora Reduced feed efficiency, weight gain, egg production Disease more severe in turkeys – swollen paranasal sinuses	Isolation of organism Necropsy – sinusitis, tracheitis, air sacculitis; necrotic, hyperplastic, swollen mucous membranes Secondary infections common	Complete eradication Vaccination
<b><i>Mycoplasma synoviae</i></b>	chickens turkeys other fowl	aerosol direct contact transovarial	Synovitis, lameness, swollen footpads, hocks and wing joints Greenish diarrhea Subclinical respiratory infection	History and clinical signs Isolation of organism Necropsy – yellow-gray exudate in synoviae; enlarged bile stained liver; enlarged pale spleen and kidney;	Isolation and removal of infected birds Tetracycline helpful
<b><i>Mycoplasma meleagridis</i></b>	turkeys	sexually from tom transovarial	Decreased hatchability, poor poult quality, reduced growth rate, deformed necks and legs possible	Clinical signs and history Necropsy – airsacculitis with caseous exudates, tracheitis, microscopic lesions of hen reproductive tract	Identification and removal of reactors Monitor semen Egg dipping in tylosin Antibiotics to new hatchlings
<b><i>Salmonella enteritidis</i></b>	chickens turkeys other fowl	transovarial	Subclinical; Possibly depression, poor growth, weakness, diarrhea, dehydration	Fecal culture Necropsy – typically no lesions; possibly enlarged liver with focal necrosis	Strict management protocols Periodic culturing of litter, dust, etc Heat treated feed
<b><i>Avian Influenza</i></b>	chickens turkeys other fowl	direct contact aerosol	Variable with virus strain. Sudden death Depression, off feed, sudden drop in egg production Cyanotic combs and wattles, edema of the head, eyelids, comb wattles and hocks; petechial hemorrhages of hocks and feet	Necropsy – mucous exudate in trachea, swelling of neck and face, petechial hemorrhages, urates in kidney tubules, congested conjunctiva with petechiae Virus isolation	Strict sanitation and biosecurity vaccination Depopulation if highly pathogenic strain